Air Quality Event Summary
July 30, 2004

Typical warm summer weather led to unhealthy air quality on Friday, July 30 as temperatures reached the high 80s across the state and skies were clear for a good part of the day. Light south-southwesterly winds were present statewide and a noticeable sea breeze began to affect the coastline in early afternoon. Particulate matter concentrations were elevated early in the day as transported $PM_{2.5}$ was already present in the northeast, and they continued to rise into the evening. Ozone levels increased rapidly in the afternoon, particularly along the seacoast, where a strong sea breeze was becoming established. Though ozone levels inland began to drop by mid afternoon in connection with higher wind speeds, seacoast ozone remained high under the onshore flow. The monitors at Portsmouth and Rye (Odiorne State Park) recorded levels in the "unhealthy for sensitive people" range, while most inland monitors barely reached moderate ozone levels.

The tables below show the highest ozone and $PM_{2.5}$ concentrations for the July 30 event. Further below are afternoon streamlines for the day, along with maximum 8-hour ozone levels. The streamline analysis from 3 PM clearly shows the sea breeze effect, with wind direction contours seen curving inland along the New Hampshire and Maine coasts.

Maximum Ozone and $PM_{2.5}$ Concentrations
July 30, 2004

Ozone

monitor	1-hr avg. max ppb	8-hr avg. max ppb
Manchester	81	71
Keene	85	69
Odiorne	114	93
Claremont	82	72
Nashua	92	80
Concord	81	72
Portsmouth	116	98
Miller	89	78
Laconia	64	59
Mt Washington	70	64
Haverhill	69	57
Camp Dodge	71	53
Pittsburg	55	46

1-hr exceedance is> 124ppb
8-hr exceedance is > 84 ppb

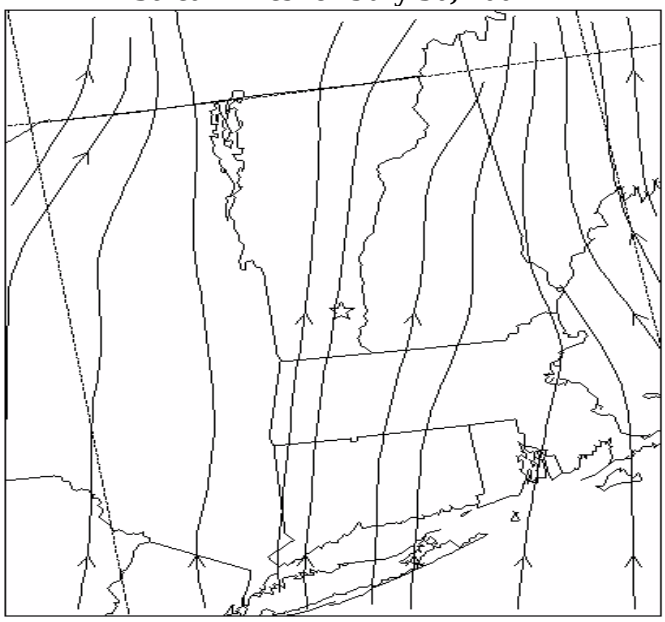
Particle Pollution (PM 2.4)

monitor	1-hr avg. max ug3	24-hr avg max ug3
Manchester	32	22
Portsmouth	37	28
Haverhill	30	14
Miller	24	15
Camp Dodge	18	3

no 1-hour standard

24-hr exceedance is > 65.5 ug/m3

Streamlines for July 30, 2004



Maximum 8-Hour Ozone for July 30, 2004